









Mathematics

prepared by: Mrs. Asmaa Sakr

Trust Academy Online Exclusive Manager Mr. Amr Mohi 01025544482



Trust Academy Online



<u>Mathematics</u>

Choose the correct answer:

1- The Common factor for all numbers is

- a) 0
- b) 1

c) 2

d) 3

2- The number which all prime factors are 2, 3, 5 is

- a) 15
- b) 20

c) 30

d) 45

 $3 - \frac{3}{5} - \frac{1}{2} = \dots$

- a) $\frac{2}{3}$ b) $\frac{1}{5}$

c) $\frac{1}{10}$

d) $\frac{4}{7}$

4- The cofficient of the algebricterm.

- a) 1
- b) k

c) 4

d) - 4

5- The outlier of a data set 47, 45, 49,43, 125 is

- a) 82
- b) 125
- c) 43

d) 48

6- The expression which reperesents ((number Y added to

- 5)) is
- a) Y + 5 b) Y 5 c) 5Y d) $\frac{Y}{5}$

7- $-\frac{3}{7}$ Zero

- a) >
- b) =

c) <

 $d) \geq$

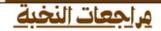
8- The intger that lies between 2 and -4 is

- a) -5
- b) -2

c) 3

d) -6

Mathematics



9- The number subtrated from 10 is

- a) A-10
- b) A+10
- c) 10-A
- d) 10A

10- The range (2, 3, 9, 7) is

- a) 2
- b) 7

c) 3

d) 11

11- The additive inverse of 5² is

- a) -5
- b) -25

c) 25

d) 10

12- The coefficient in the expression (3x - 5) is

- a) 3
- b) 5

c) 2

d) 8

13- is divisible by both 2, 5

- a) 14
- b) 70

c) 35

d) 39

14- The following data are numerical except

- a) Height
- b) weight
- c) Blood type
- d) Age

15- $X \ge 8$ represent

- a) Equation b) Expression c) inquelity d) verbal.

16- The indpendent variable in relation X + 2 = y is

- a) X
- b) y c) 2 d) 1

17- The first quartile for the value 42,35, 7, 63, 28, 21, 14 İS.....

- a) 7
- b) 14

- c) 35
- d) 21

18- If: 110 + C = 135, then the value of c is

- a) 245
- b) 30

- c) 15
- d) 25



<u>Mathematics</u>



19- -4 >

- a) -3
- b) −2

- c) -6
- d) 0

20- The number of terms of the expression: 7y + 6 + 2f + 3

- a) 8
- b) 4

- c) 5
- d) 3

21- The mode of the Values (6, 3, 5, 6, 2, 4) is

- a) 3
- b) 2

- c) 5
- d) 6

22- All of the following is a numerical data except

- a) Age b) Length c) school name d) weight

23- Six cube =

- a) 6^3
- b) 3×6
- c) 3^6
- d) 6^2

24- the range of the Valves 5, 6, 4, 8, 11, 3 and 7 is

- a) 3
- **b**) 6

- c) 9
- d) 8

25- All the following divisible by 6 except

- a) 924
- c) 120

- c) 663 d) 252

26- the best subset of $\frac{1}{5}$ is number.

a) a Counting

b) a natural

c) an integer

d) a rational

27- the median of the values 9, 4, 8,1 and 3 is

- a) 4
- b) 1

- c) 2
- d) 3



<u>Mathematics</u>



28- "331+" is divisible by 3

- a) 0
- b) 1

- c) 2
- d) 3

29- The number is one of the solution of the inqulity $X \leq -7$

- a) 4
- b) -6

- c) -8
- d) 0

30- If the X - 3 = 12 then $X - 1 = \dots$

- a) 10
- b) 14
- c) 2
- d) 15

31- The least common Multiples of 3 and 6 is

- a) 3
- b) 6
- c) 18
- d) 36

32- The set of integers the set of rational numbers.

- a) belongs to
- b) doesn't belong to
- c) is a subset of d) isn't subset of

33- The = the greatest value – the smallest value.

- a) range b) mean c) median d) mode

34- If X = 1 - |5|, then $X = \dots$

- a) 15 b) 8

- c) -8 d) -15

35- One of the solution set of X < 2 in the sut of natural numbers

- a) 1
- b) -1

- c) -2 d) -3

Mathematics



36- Zero is number

a) positive

b) negative

c) prime

d) neither positive nor negative.

37- The intger which just after −4 is

- a) -3
- b) -5

- c) 4
- d) 0

38- The mode of the Values; 2, 4, 2, 6, 2, 7 and 3 is

- a) 2
- b) 3

- c) 7
- d) 6

39- If 2m = 12 then m =

- a) 4
- b) 6

- c) 12
- d) 24

40- "8 squared" in exponential form is

- a) 8⁺
- b) 8³

- c) 8^2
- d) 8⁵

 $41 - |-3| \times |-5| = \dots$

- a) -15
- b) 15

- c) 8
- d) -8

42- The coefficient in the expression $6 - 3 + 5 \times 10^{-2}$ is

- a) 5
- b) 3

- c) 6
- d) 0

43- The outlier of the Values 33, 36, 34, 2, 35, and 38 is.....

- a) 33
- b) 34

- c) 36
- d) 2

44- The G. C.F of two numbers 8 and 9 is

- a) 1
- b) 3

- c) 2
- d) 0

45- |-3| the opposite of -3

- a) <
- b) =

c) >

6

d) other wise

Mathematics

مراجعات النخبة

46- In the equation x = 24 + 7 the dependent variable is....

- a) y
- b) x

- c) 7
- d) 7y

47- Which number does Not belong to the set of natural numbers?

- a) 3
- b) 2

- c) 0
- d) -5

48- The number of like terms of the expression 2k - 2m + 5k is..... term (5).

- a) 0
- b) 2

- c) 1
- d) 3

49- The greatest non-positive number intger is

- a) 0
- b) 1

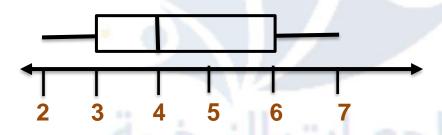
- c) -1
- d) 2

50- All even numbers are divisible by

- a) 2
- b) 3

- c) 6
- d) 5

51- The O3 in the opposite box plot



- a) 3
- b) 4

- c) 6
- d) 7

52- The expression 2x - 3 = y, the ordered pair (2,.....) staisfies the expression

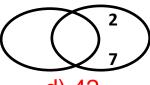
- a) 2
- b) 3

- c) 1
- d) 7



مراجعات النخية

53- From the opposite Venn diagram the G.C.F. is

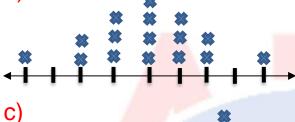


- a) 1
- b) 0

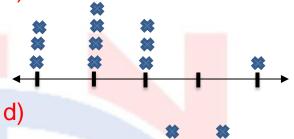
- c) 3
- d) 42

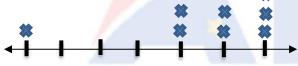
54- In which dot plot pargraph the mean stay the some





b)







55- The first operation your preform for solving the expression $25 \div 5 + (8-1)^2$ is

a) division

b) exponent

c) subtraction

d) Addition

56- is algebraic expression

- a) 9-3y b) 5^2-3 c) $3 \times (1+4)$ d) 9^2-7

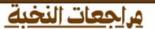
57- - | - 9 | =

- a) -9
- b) 9
- c) 6

d) 7



Mathematics



مقالي

1-A family	has two	cakes,	the far	mily ate	$e^{\frac{3}{8}}$ of	the firs	t ca	ıke
and ate	$\frac{1}{4}$ of the	second	d, How	much	of the	e cake	is I	eft
from eac	h kind?							

2-Arrange in	descendir	ng order 11	, -8, 15	-9, -9, -5
	,			

3-Two contestants practice climbing rocks fixed to a wall and there is a platform in the middle. The contestant (A) was at a distance of 8 meters below the platform and the contestant (B) was at a distance of 3 meter above the platform which one is closer to .winning the race?

.....

4-Write the following rational numbers in the form $\frac{a}{b}$ such that $b \neq 0$

a) 4 b) -45

.....

5-Arrange the following numbers ascendingly:

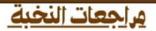
2.1, 1.4, $3\frac{1}{4}$, $-1\frac{1}{3}$, $-2\frac{1}{2}$

.....

6-Write the rational number that lies between -9, -9.1

.....

Mathematics



7-What is the exponential expression for the number whose base is 2 and whose power is 3? What is its numerical value?

8-A)Find the value of the numerical expression: $5 \times 2^2 - [9 - (6 + 3)]$

8-B)Evaluate the expression: $9 + (p^2 - 3) + 2$ when p = 3

9-Youssef wants to buy some meals, if the price of one meal is 100 pounds, and 15 pounds is added to the total price as a cost of a delivery service for any number of meals. Write down the algebraic expression that represents this situation, how many pounds does Youssef pay when buying 3 meals?

10- What is the value of the algebraic expression:

$$(t^2-3) \div 2$$
 when the value of $t=3$?

11- Evaluate the algebraic expression: $5 + (P^2 + 3)$ If P = 3?

Mathematics

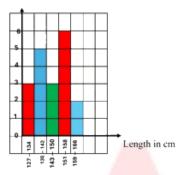


- 12- Is the algebraic expression 3x + 2, is equivalent to the algebraic expression 2(x + 2) when the value of x = (1 or 2)?
- 13- Find the value of x in the equation x + 3 = 12
- 14- Use the integer line to find the value of x in the inequality x>-1
- 15- A poster on the road shows a speed limit of 40 km/h. Circle the speeds allowed on this road (38 km/h., 50 km/h.,30 km/h., 40 km/h.,49 km/h.,43 km/h.)
- 16- Classify a question that produces a single answer as a statistical or non-statistical question?
- 17- How many books does your class read in a year? This question produces numerical or categorical data?
- 18- What is the name of a graph that includes data shown above a number line?

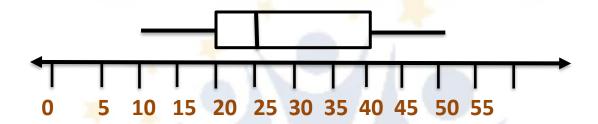
Mathematics



19- The corresponding graph shows the heights of some students in centimeters from the diagram. How many students are |5| centimeters or more tall?



20- The figure in front of you shows the first quartile and the third quartile.



21- From the data set (4, 8, 5, 3, 1, 7, 6), state the number that represents the lower quartile?

22- From the data set (4, 8, 5, 3, 1, 7, 6), state the number that represents the upper quartile?

12

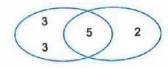
23- Write the median of the data set (5, 6, 3, 7,5)?

Mathematics



24- Draw the box plot for the following numerical data (0, 1, 7, 4, 18, 12, 0, 9, 12, 11, 13, 17, 15)?

25- Using the opposite Venn diagram, complete.



b. L.C.M =

26- Evaluate: y = 2x + 5 at x = 3

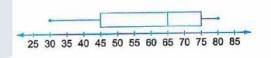
27- Determine which of the following numbers are divisible by 3.

516, 335, 201, 531, 622, 804, 305

.....

28- Complete using the opposite box plot:

Minimum value:



Maximum value:

Median: Q1:

Q3:

29- Order the given set of numbers from greatest to least.

 $3.4, -2\frac{1}{2}, 0, -4\frac{3}{7}, 3\frac{1}{4}$

Greatest		Least

Mathematics

مراجعات النخبة

30- The number of shares donated by the Food Bank's top donor is 1,250 shares. Are the shares can be distributed equally among 10 different branches of the Food Bank branches?

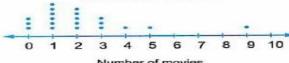
.....

31- Find the G.C.F of the numbers 7 and 12 using Venn diagram.

.....



32- From the opposite dot plot answer the following questions.



a. How many people saw 3 movies?

b. How many people saw 2 movies or more?

or new many people can 2 metres or more

33- Amr wanted to distribute 104 kg of apple among 4 boxes. Is it possible? and why?

.....

34- Evaluate the algebraic expression : $5^2 + 4(a^2 - 1)$, at a = 4

.....

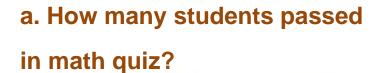
Mathematics



35- Solve the equation: x + 1 = 3

.....

36- From the opposite bar graph answer the following questions:



b. How many subjects have at least 60 students passed the quiz?

37- Find the value of the expression: $(5 \times 9 - 2x) + 3^2$ when x = 10

.....

38- Solve the equation: x + 7 = 14

.....

39- Arrange the values in an ascending order:

5, -14, |-20|, -7

40- The following frequency is the marks of a maths exam:

Marks	17-25	26-34	35-43	44-52
Frequency	5	9	15	11



Mathematics

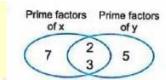
مراجعات النحية

Represent data using histogram.

b. What is the number of students who got 25 marks or less?

41- From the opposite Venn diagram:

Find the G.C.F and the two numbers.



42- From the box plot:

the median = the lower quartile =

the upper quartile =

the maximum value=

43- Find the result:

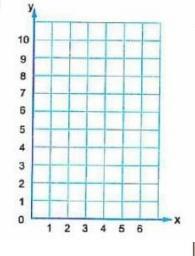
a)
$$\frac{3}{4} - \frac{2}{5} = \dots$$

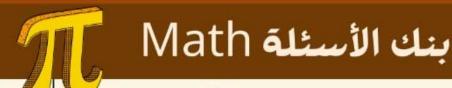
a)
$$\frac{3}{4} - \frac{2}{5} = \dots$$
 b) Find x if $3x = 15 \dots$

44- Represent graphically the relation: y = x + 1

Complete the table

X	0	1	2
У	1		
(x, y)	(0, 1)	(,)	(,)







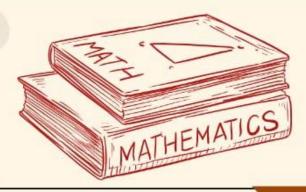


Mathematics





<u>prepared by:</u> Mrs. Asmaa Sakr





Trust Academy Online



مراجعات النخبة

الإجابات

Choose the correct answer:

1) b	2) c	3) c	4) c
5) b	6) a	7) c	8) b
9) c	10) b	11) b	12) a
13) b	14) c	15) c	16) a
17) b	18) d	19) c	20) b
21) d	22) c	23) a	24) d
25) c	26) d	27) a	28) c
29) c	30) b	31) b	32) c
33) a	34) a	35) a	36) d
37) a	38) a	39) b	40) c
41) b	42) a	43) d	44) a
45) b	46) b	47) d	48) b
49) a	50) a	51) c	52) c
53) a	54) a	55) c	56) a
57) a			



<u>مراجعات النخبة</u>

المقالى:

(1) The reminder of the first cake

$$=1-\frac{3}{8}=\frac{8}{8}-\frac{3}{8}=\frac{5}{8}$$

The reminder of the second cake

$$=1-\frac{1}{4}=\frac{4}{4}-\frac{1}{4}=\frac{3}{4}$$

$$\longrightarrow \frac{3}{4} + \frac{5}{8} = \frac{18}{24} + \frac{15}{24} = \frac{33}{24} = 1\frac{9}{24}$$

$$(2)$$
 15, 11, -5 , -8 , 9

(3) contestant (B)

(4) a)
$$\frac{4}{1} = \frac{8}{2}$$

b)
$$\frac{-45}{1} = \frac{-90}{2}$$

$$(5)$$
 $-2\frac{1}{2}$, $1\frac{1}{3}$, 1.4 , 2.1 , $3\frac{1}{4}$

$$(6) -9.01$$
 , -9.02 , -9.03

(7)
$$2^3 = 2 \times 2 \times 2 = 8$$

$$(8A) 5 \times 2^{2} - [9 - 9] = 5 \times 2^{2} - 0$$
$$= 5 \times 4 = 20$$

Mathematics



(8B)
$$9 + (3^2 - 3) + 2 = 9 + (9 - 3) + 2$$

= $9 + 6 + 2 = 17$

(9) The expression 100 k + 15

Pounds for 3 meals =
$$(100 \times 3) + 15 = 300 + 15$$

= 315 pounds

$$(10) (32 - 3) \div 2 = (9 - 3) \div 2$$
$$= 6 \div 2 = 3$$

$$(11) 5 + (32 + 3) = 5 + (9 + 3)$$
$$= 5 + 12 = 17$$

(12)

X	3x + 2	2x + 2
1	3 + 2	2 + 2
'	= 5	= 4
2	6 + 2	4 + 2
	= 8	= 6

Not equal

%th

Mid-term 2024-2025

Mathematics

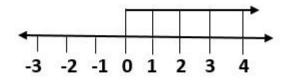
مراجعات النخبة

(13) x + 3 = 12

$$x = 12 - 3 = 9$$

$$x = 9$$

(14)



 $(15) \rightarrow 38 \text{ km/h}$

 \rightarrow 30 km/h

 \rightarrow 40 km/h

(16) non-statistical

(17) Namerical data

(18) Dot plot

(19) 6 + 2 = 8student

21

(20) Q1 = 20

$$Q3 = 40$$



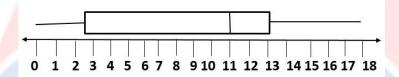
مراجعات النخبة

$$(21) Q1 = 3$$

$$(22) Q3 = 7$$

$$(23)$$
 median = 5

(24) 0, 0, 1, 4, 7, 9, 11, 12, 12, 13, 15, 17, 18



(26)
$$y = 2 \times 3 + 5$$

$$y = 6 + 5 = 11$$

$$y = 11$$

804 are duisible by 3

$$(28) \min = 30$$

$$max = 80$$

$$Q1 = 45$$

$$Q3 = 75$$

$$Median = 65$$



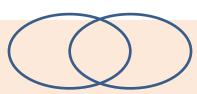
مراحعات النخية

(29) 3.4 .
$$3\frac{1}{4}$$
 , 0 , $-2\frac{1}{2}$, $-4\frac{3}{7}$

(30) yes, Because 1250 is divisible by 10

$$(31)$$
 G.C.F = 1

$$L.C.M = 84$$



- (32) a) 3 people
- b) 11 people

(33) yes, because 104 is divisible by 4

$$(34) \ 5^2 + 4(4^2 - 1)$$

$$=5^2+4(16-1)$$

$$5^2 + 4 \times 15$$

$$25 + 90 = 115$$

$$(35) x + 1 = 3$$

$$x = 3 - 1$$

$$x = 2$$

23

- (36) a) 70

b) Math, English, social

<u>Mathematics</u>

$$(37)$$
 $(5 \times 9 - 2 \times 10) + 3^2$

$$(45-20)+9=$$

$$25 + 9 = 34$$

(38)
$$x + 7 = 14$$

$$x = 14 - 7 = 7$$

$$(39) -14, -7, 5, 1.201$$

b) 5 student

(41) G. C.
$$F = 2 \times 3 = 6$$

$$(42)$$
 The median = 5.5

مراجعات النخية

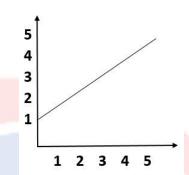
(43)

a)
$$\frac{15}{20} - \frac{8}{20} = \frac{7}{20}$$

b)
$$3x = 15 \rightarrow x = \frac{15}{3} = 5$$

(44)

1	2		
2	3		
(1, 2)	(2, 3)		



مراجعات النخية